



## Litter Storage for Poultry

TN313b

### DEFINITION

A pole-barn type structure used to temporarily store poultry litter in an environmentally safe manner.

### WHEN APPLICABLE

A poultry litter storage facility should be considered when:

- storage is for more than 90 days
- split applications of litter may be needed
- cleanout of the poultry houses must be done at a time when the litter cannot be land-applied

Storage for short periods of time can be accomplished with Waste Field

Storage (see Tennessee NRCS guide sheet Waste Field Storage, TN 749). Litter storage facilities are often constructed in combination with a compost facility with both units under one roof (see Tennessee NRCS guide sheet Composting Poultry Mortality, TN 317).



It is highly recommended that a litter storage building be located:

- as close to the poultry operation as practicable
- at a well-drained site
- at least 330 ft. (new operation) or 165 ft. (expansion at an existing operation) from any public use area or non-owner dwelling
- at least 100 ft. from an up-gradient well
- at least 300 ft. from a down-gradient well
- at least 200 ft. from any natural water course or lake
- at least 100 ft. from any drainage ditch

Litter storage facilities are engineered to withstand snow and wind loads normally associated with Tennessee weather. Design features such as post and timber size, post embedment depth, truss design, knee bracing, and structural connections are critical to the integrity of the building.

The size of the facility is dependent upon its management. Generally, a facility provides enough storage for ½ or less of the litter produced each year.

All structural wooden components below the roofline of the building and all wood in contact with litter should be pressure treated. Posts are specified to have a high level of preservative treatment and may require special order.

The floor of the storage facility can be compacted soil. However, experience has shown that a concrete floor provides the easiest management of the litter and is often preferred by most operations (NOTE: compost bins are required to have a concrete floor).



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### OPERATION & MAINTENANCE

1. Fires can develop in stacked poultry litter through spontaneous combustion. Special precautions should be taken to prevent this from happening (see Tennessee NRCS guide sheet Preventing Fires in Litter Storage Structures, TN 313).
2. The facility should be thoroughly inspected at least twice a year when empty. Any wooden parts, hardware, or other replaceable parts that are damaged or show excessive wear or decay should be replaced.
3. All disturbed areas around the structure, including spoil or borrow areas, should be vegetated or covered with gravel to prevent erosion.

### REFERENCES

Tennessee NRCS Conservation Practice Standards

Waste Storage Facility, Code 313

Composting Facility, Code 317

Critical Area Planting, Code 342

Tennessee NRCS Guide Sheets

Waste Field Storage, TN 749

Preventing Fires in Litter Structures, TN 313

Composting Poultry Mortality, TN 317

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